

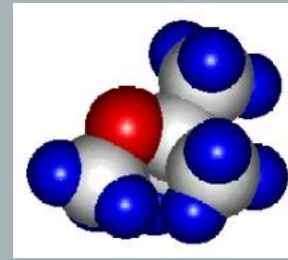
SB 380 and the MtBE Remediation Bureau

Presented by Gary Lynn, PE
May 11, 2016



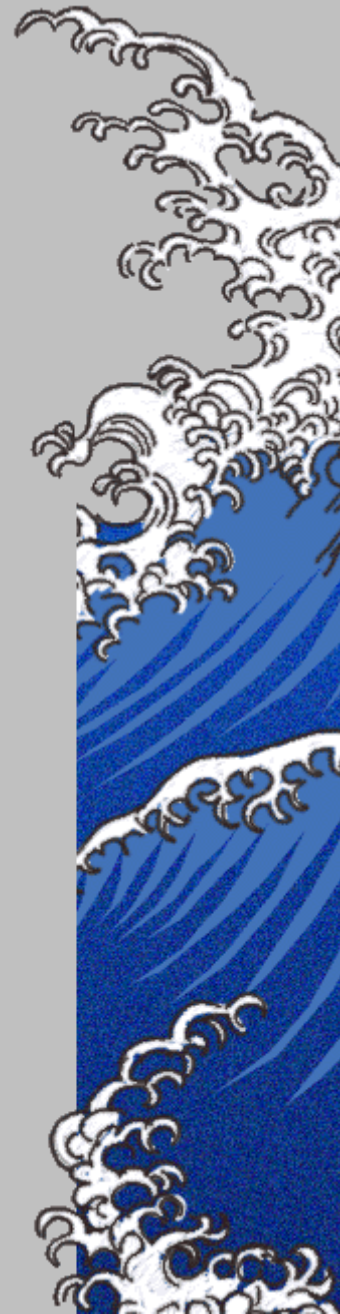
Image from:
<http://galleryhip.com/gasoline-spill-art.html>

What is MtBE?



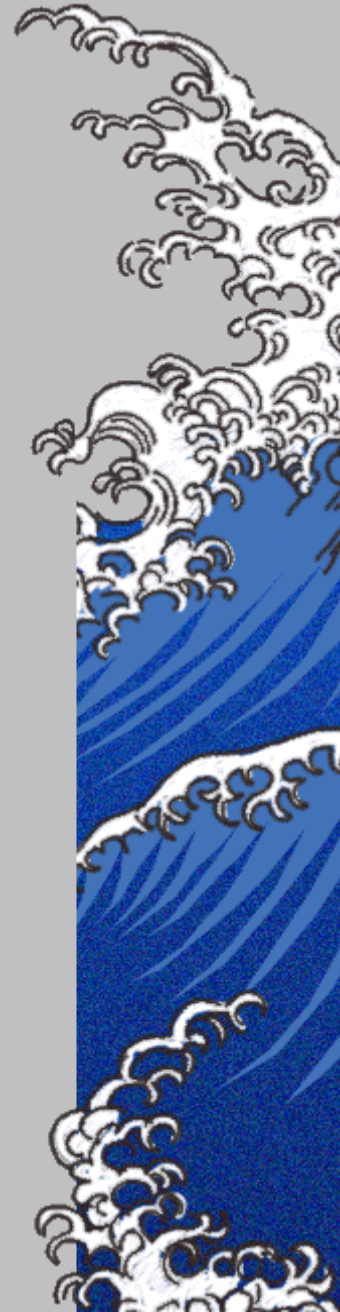
✦ Gasoline Additive

- ✦ *Used in New Hampshire gasoline supply from 1979 thru 2006 for octane boost*
- ✦ *Oxygenate for Clean Air Act's Reformulated Gasoline Program (Up to 11% by volume of gas from 1995 thru 1997 and up to 15% from 1998 to 2006)*
- ✦ *Banned from NH gas since 1/1/2007*



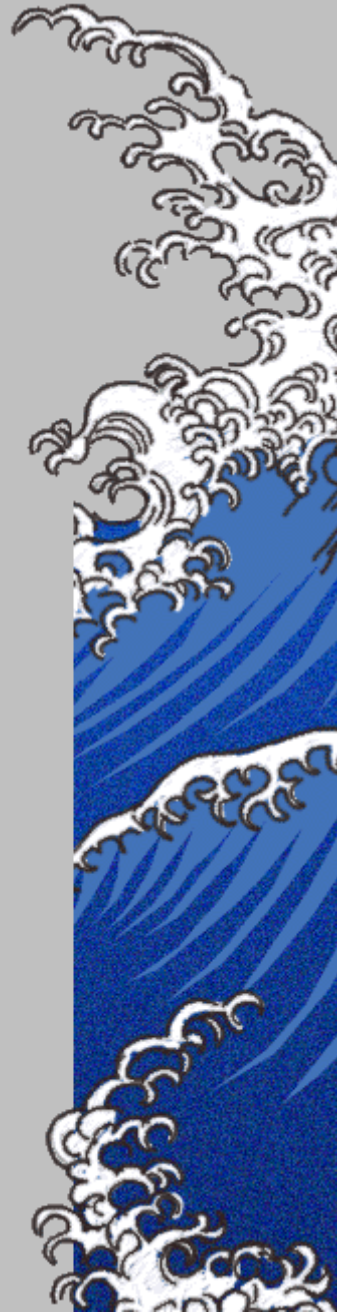
Banned but relevant?

- ▶ *Still the most commonly detected synthetic organic compound in NH groundwater*
- ▶ *Potential for drinking water project funding*
 - ▶ *State of NH MtBE Litigation*
 - ▶ *Settlements with Multiple Petroleum Refiners and Marketers (2013)*
 - ▶ *\$81.6 million available for MtBE cleanup*
 - ▶ *ExxonMobil Trial (2013)*
 - ▶ *\$236 million verdict*
 - ▶ *SB 380 Enacted (RSA 485-F)*



SB 380

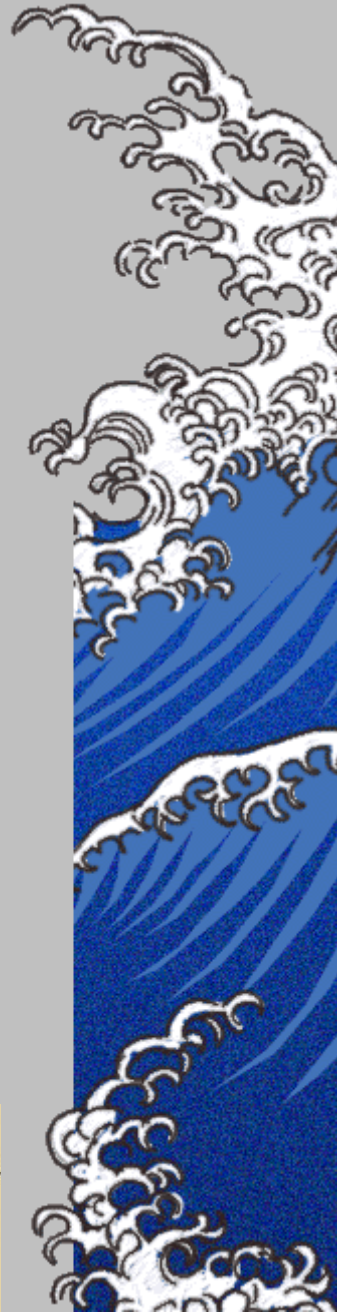
- ▶ SB380: Legislation establishing a drinking water and groundwater trust fund
- ▶ Status
 - ▶ 0 No votes
 - ▶ Signed into law by Gov. Hassan 3/31/2016
 - ▶ Effective immediately
- ▶ Provides >> \$236 million for the Trust Fund 😊
- ▶ But... ExxonMobil v. State of NH jury award is the sole source of funding 🤔



ExxonMobil Case

▲ *ExxonMobil Trial*

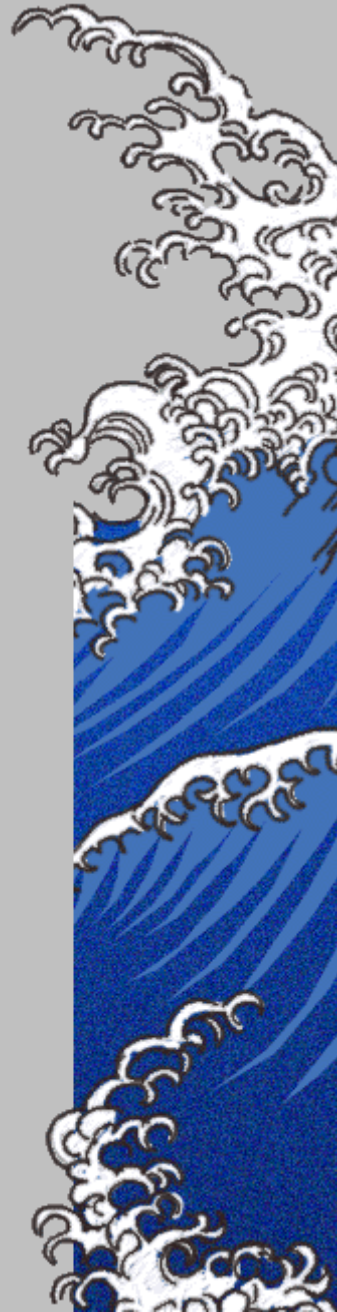
- ▲ *MtBE Lawsuit filed by NH in 2003*
- ▲ *State won three+ month jury trial in 2013, verdict appealed*
- ▲ *NH Supreme Court Order (10/2/2015)*
 - ▲ *ExxonMobil case jury verdict affirmed*
 - ▲ *Motion to reconsider later rejected*
- ▲ *U.S. Supreme Court writ of certiorari filed*
 - ▲ *DOJ filed response to writ - 4/5/2016*
 - ▲ *U.S. Supreme Court considering whether to hear the case*
 - ▲ *Funding for SB380 contingent on outcome*



SB 380 Key Elements

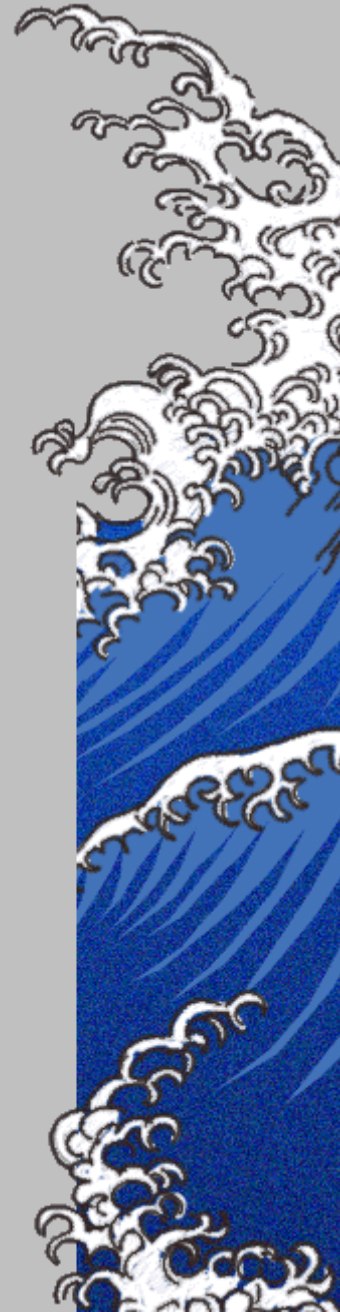
▲ Funding for:

- ▲ Mapping of classes of groundwater and groundwater contamination
- ▲ Drinking water aquifer protection
 - ▲ Well head protection program assistance
 - ▲ Inventory and management of activities that could impact groundwater quality
- ▲ Investigation, management and remediation of contaminated groundwater
- ▲ Infrastructure
 - ▲ Protection against future contamination or impacted drinking water source by expansion of drinking water infrastructure
 - ▲ Cost-sharing grants for design, construction and expansion of public water systems



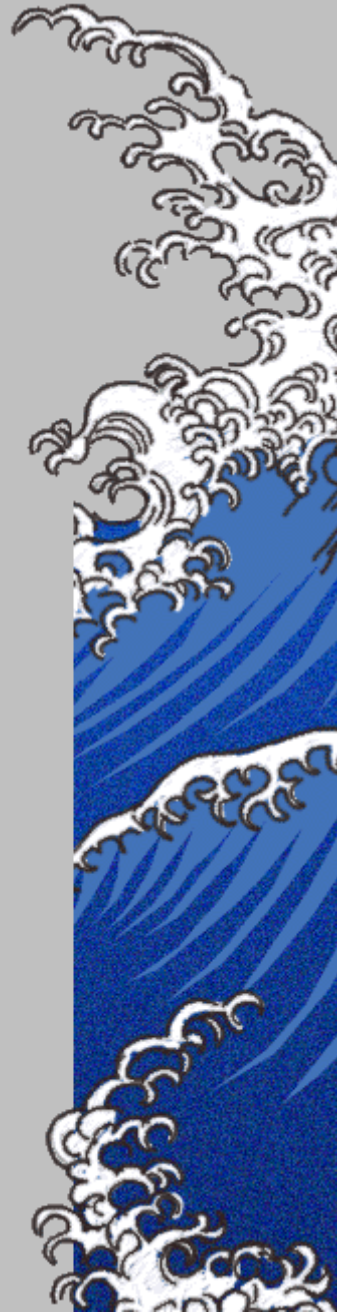
SB 380 Implementation Steps

- ▶ Obtain Funds – ExxonMobil case resolution
- ▶ Appoint 10 member Advisory Committee
- ▶ Advisory Committee Work Products
 - ▶ Advice and counsel to DES on future work and project priorities
 - ▶ Meet at least annually
 - ▶ Provide an annual report to the legislature
 - ▶ Prepare a report every 5 years on the program's progress
- ▶ DES implementation of Advisory Committee priorities



Building toward a SB380 Future

- ▲ MtBE lawsuit settlements
 - ▲ Funds are already accessible
 - ▲ \$81.6 million in settlement funds for MtBE cleanup, approximately \$72 million remaining
 - ▲ Experience being gained for activities similar to SB 380
- ▲ Existing Programs
 - ▲ MtBE Contamination Mapping
 - ▲ Aquifer Protection from MtBE releases
 - ▲ Investigation and Remediation of MtBE sites
 - ▲ Infrastructure



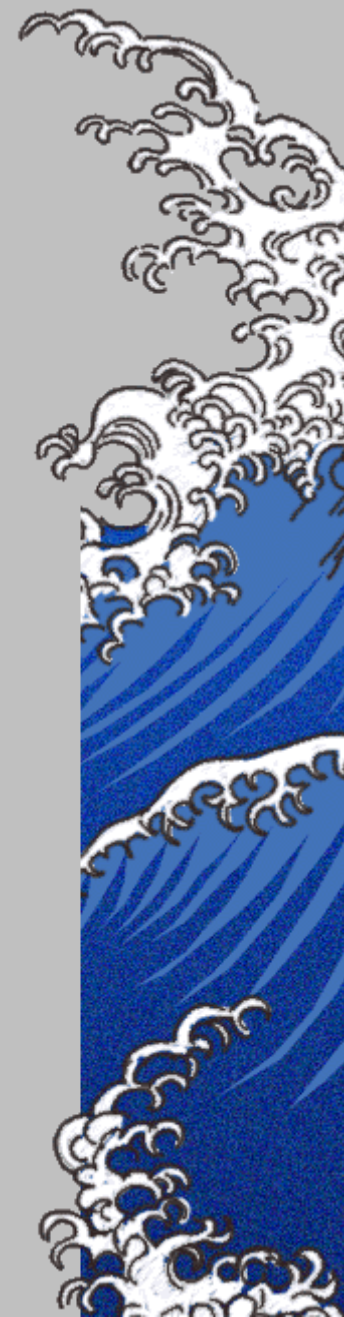
A woman with blonde hair in a ponytail, wearing a black hoodie, is kneeling on a wooden plank. She is holding a small white device with a blue cap, which she is using to draw water from a blue Flexo water storage tank. The tank has a black label with the word 'Flexo' in white. A blue bucket is visible in the foreground. The background shows a concrete wall and some pipes.



Sampling Program Objectives

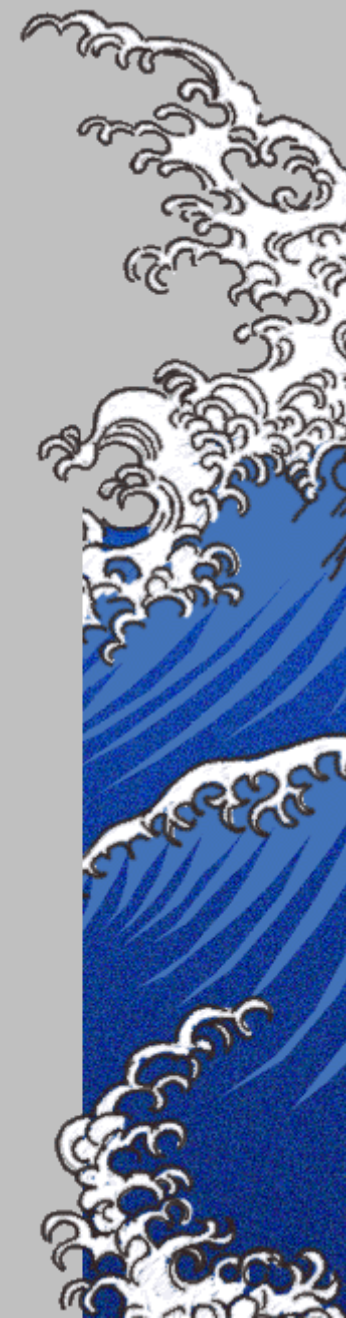
★ *Current focus*

- ★ *Integration of MtBE contamination data via EMD and GIS*
- ★ *Sample areas at high risk for MtBE contamination*
- ★ *Support infrastructure, remedial and investigative efforts*
 - ★ *Water line extension connections*
 - ★ *Plume extent*



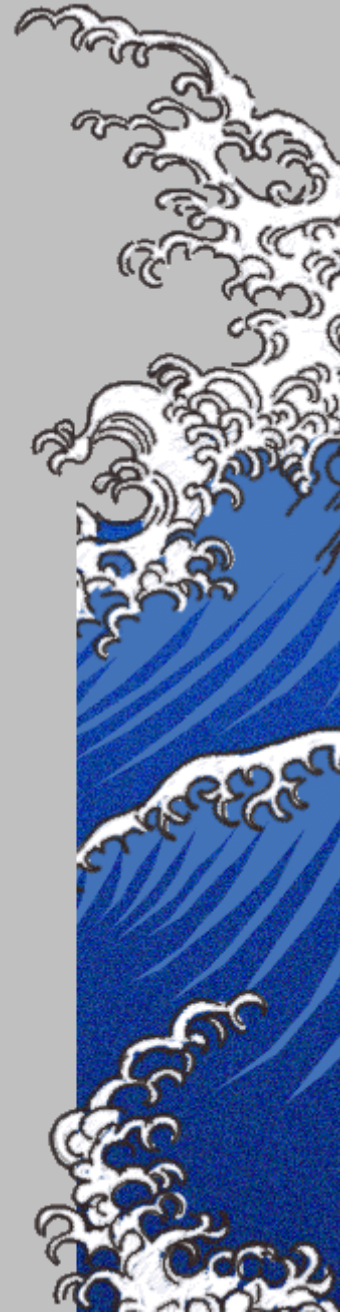
Sampling Program Stats

- ▶ *MtBE Sampling (Settlement Funds)*
 - ▶ *36 Communities to date*
 - ▶ *>5,000 Invitations mailed, >2,800 Water Supplies Sampled, >50% Participation Rate*
 - ▶ *462 MtBE Detections (>17% of samples)*
 - ▶ *9 water supplies w/ MtBE > AGQS*
- ▶ *Other Analyses Facilitated (private or other State Funding sources)*
 - ▶ *582 Standard, 256 Radiological, 100 metals, 148 other (Radon, bacteria, arsenic, etc)*
 - ▶ *435 PFOA*

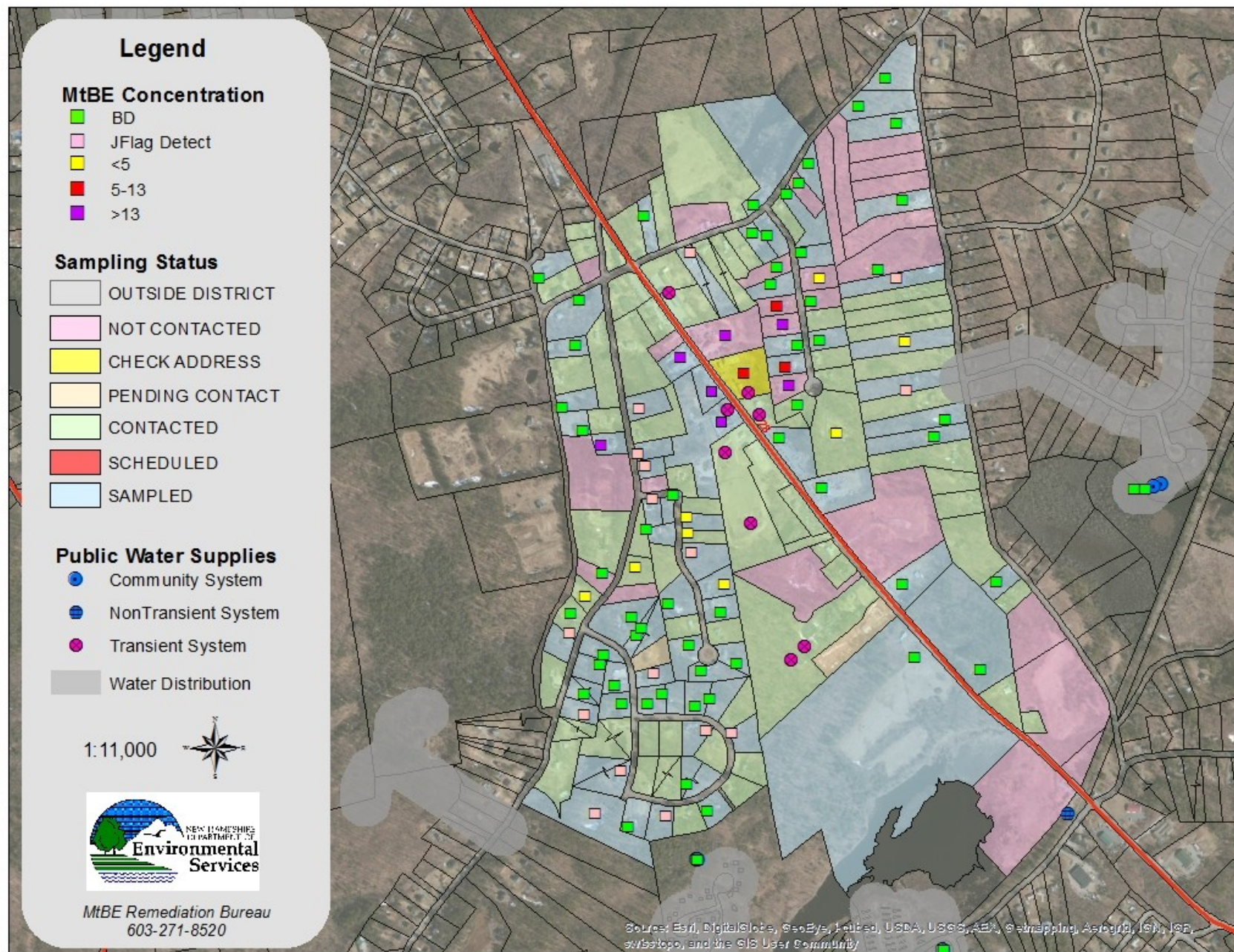


Sampling Program Example - Derry

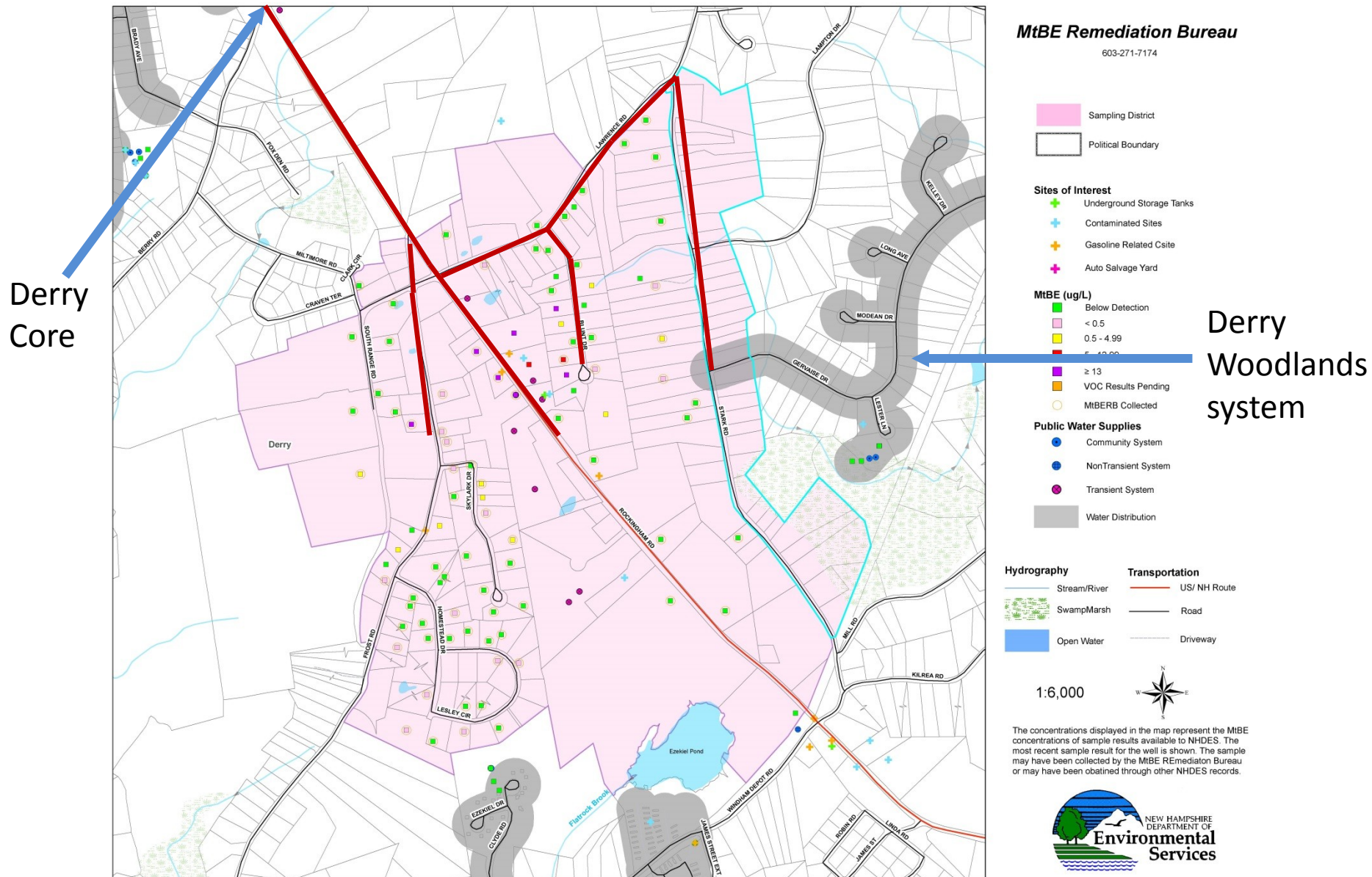
- ▶ *Gas station and dry cleaner releases*
 - ▶ *UST system vapor releases documented*
 - ▶ *Offsite gasoline impacts solely from MtBE*
- ▶ *MtBERB Assistance*
 - ▶ *Sampling district*
 - ▶ *Water line extension design underway*



Sampling District - Dry Cleaner/Gas Station/Ether Site



Water line extension solution



Aquifer Protection

- ▶ *Settlement funded work - investigation and/or elimination of MtBE releases*
 - ▶ *UST Removal Program*
 - ▶ *2015 UST upgrade deadline*
 - ▶ *185 USTs removed, 202 removed when completed*
 - ▶ *Motor Vehicle Recycling Facility Spill Prevention*
 - ▶ *Gasoline transfer spill reduction equipment – 80 of 118 active yards (68%)*
 - ▶ *Spill containment concrete pad projects – 31 yards*



Underground Storage Tank Removal

Tight alley



Underwater



In the street



Spill Prevention Equipment Project



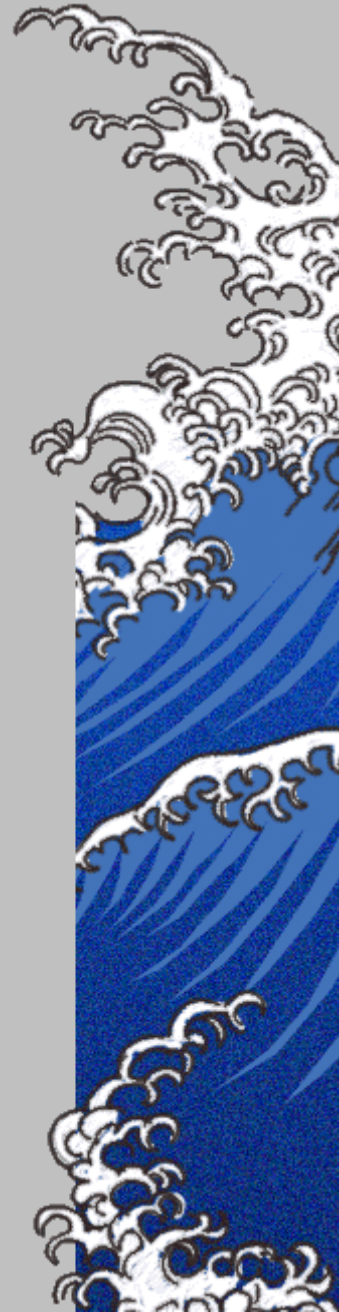
Gasoline transfer, before and after



Tank drill system

Remedial Program

- ★ *Objective: Investigation and cleanup of MtBE releases*
- ★ *Supplements ODD and GREE funds*
 - ★ *Remedial actions*
 - ★ *13 completed and >10,000 tons of contaminated soil addressed, additional projects underway*
 - ★ *Investigations*
 - ★ *Multiple investigations underway or completed*
 - ★ *Follow up on sampling program MtBE contamination detects*



Remediation



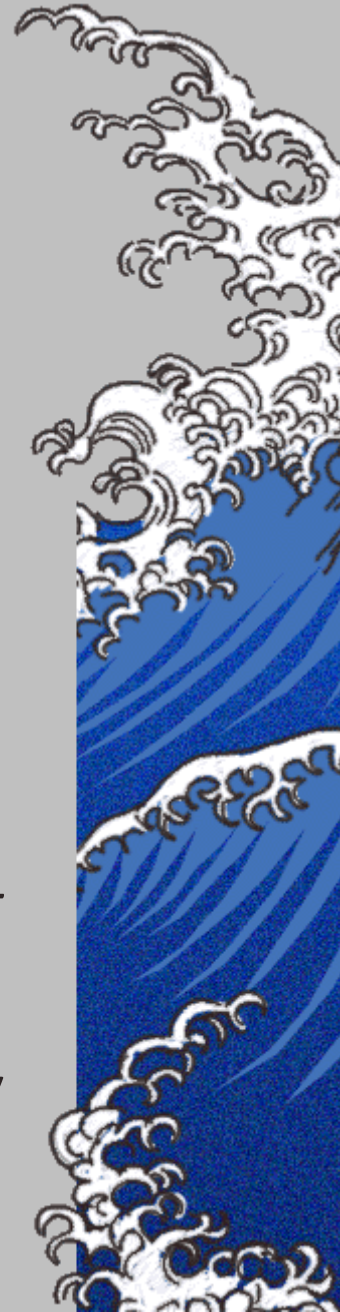
Richmond



Dover

Infrastructure Remedies

- ▶ *Must address MtBE contamination*
- ▶ *Sampling program used to define service area, when necessary*
- ▶ *Ineligible costs*
 - ▶ *Non-MtBE related interconnections*
 - ▶ *Upsizing of pipe*
 - ▶ *Additional storage, pumping capacity, etc.*
- ▶ *Payment via Reimbursement or Direct Applicant Process*
- ▶ *9 projects ongoing or completed, approximately \$10 million if all proceed to completion*



Infrastructure: Windham Water Line



300+/- Ledge Probes & Site Survey



Little Falls Cooperative



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GeoInsight

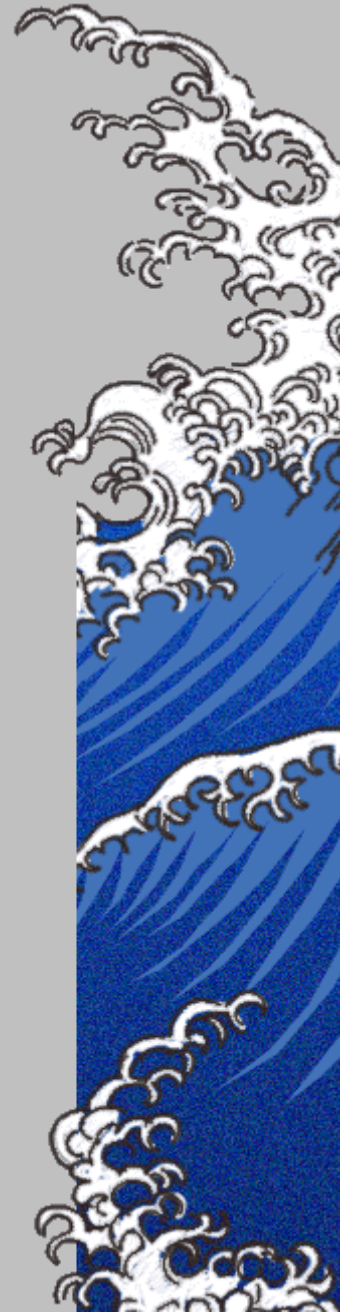
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GeoInsight

Little Falls Cooperative, Inc.

Cost History - paid by MtBE Settlement Funds

- Engineer's Opinion of Probable Construction Cost: \$505,705.00;
- Received three bids (\$494,281.00 to \$375,995.00, SUR low bidder);
- CO #1 added \$99,547 to contract (\$67,647 Balancing Quantities, \$8,662.50 Expansion Tanks; \$3,000 for drywell; \$19,900 for wearing course; and \$337.50 to decommission an existing monitoring well) New Contract Value: \$475,502.00;
- CO #2 added \$14,574.62 for additional electrical items required to make heat tracing code compliant;
- Contract Value at Completion - \$489,585.75.



Little Falls Cooperative Inc.



Slide courtesy of
GeoInsight

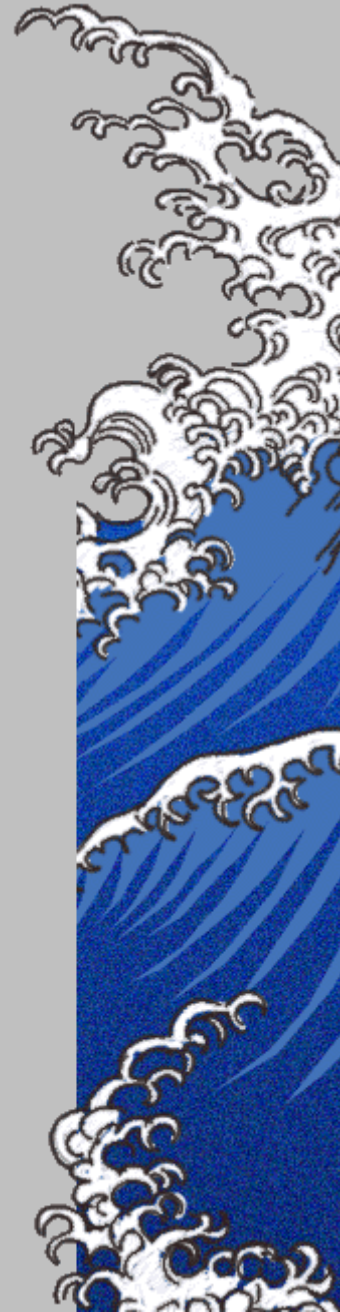
Little Falls Cooperative, Inc.



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SB 380 Reprised

- ▶ *Ideas Welcome – Topics to think about*
 - ▶ *Sustainability – ExxonMobil \$\$ to be invested*
 - ▶ *Grant Programs – Changes in eligible activities and match?*
 - ▶ *Aquifer Protection Programs – How to implement?*
 - ▶ *“Protect against future contamination... by drinking water source protection” SB 380*
 - ▶ *“Cost sharing grants ... for the establishment and expansion of wellhead protection areas” SB 380*
 - ▶ *“Assist ... in the development and administration of local wellhead protection programs” SB 380*
 - ▶ *Statewide Drinking Water Priorities*



Contact Info

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